

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P246220

Luminaire Tested: **LSR8B40D010 EC8B40935 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40935 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3761.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

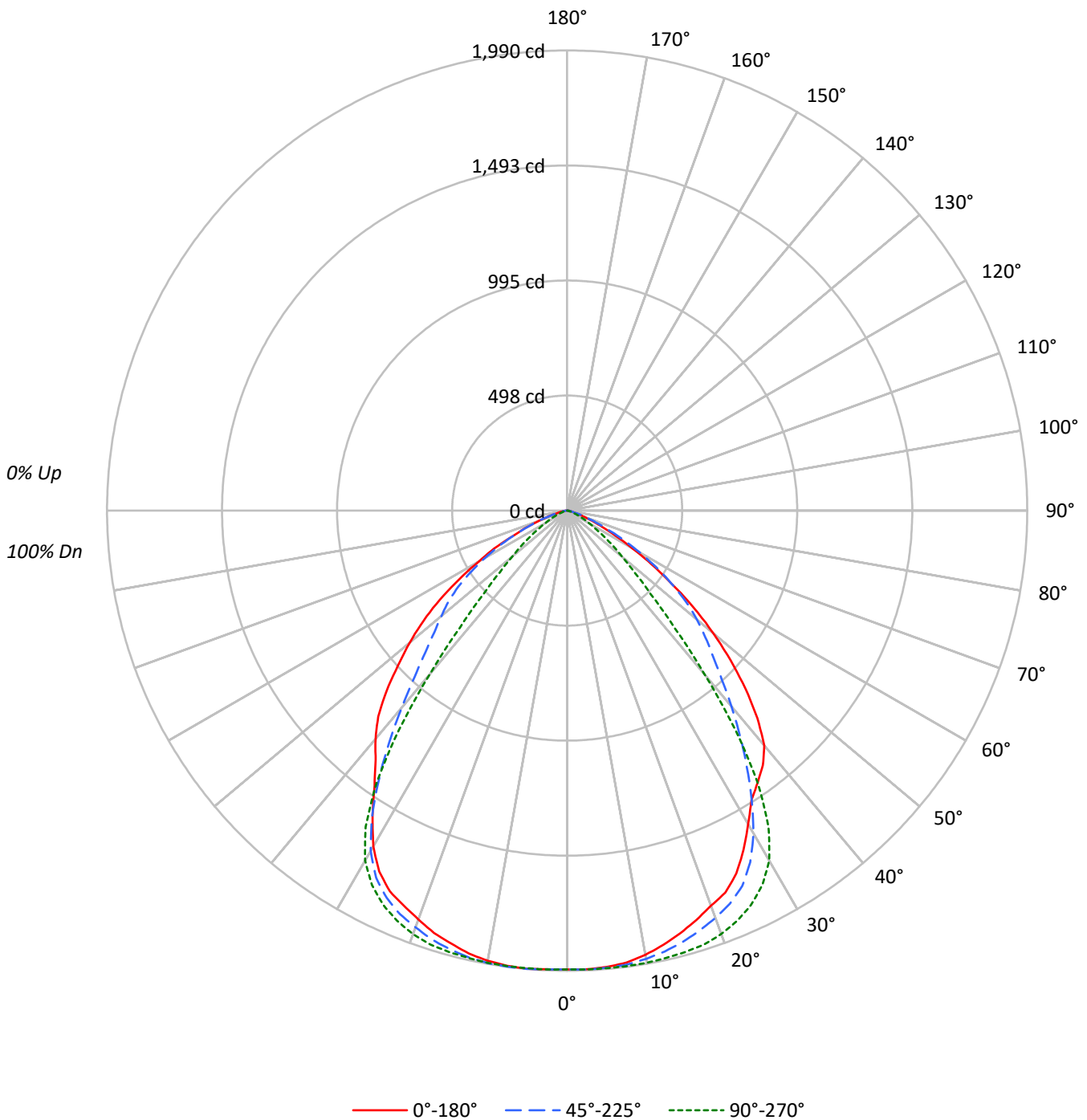
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	61192	61192	61192
5°	61326	61490	61558
10°	61068	62167	61901
15°	60391	63079	61888
20°	59665	63964	61729
25°	58892	64037	61791
30°	55714	62237	59698
35°	54050	54091	54652
40°	53381	37215	51879
45°	47564	22341	48214
50°	39549	14872	42614
55°	29660	10252	36133
60°	20099	6833	27259
65°	12127	4429	18730
70°	6726	2398	11522
75°	3050	1013	5969
80°	2646	1137	4155
85°	3007	1486	4140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.4	5.0
10°-20°	550.0	14.6
20°-30°	834.8	22.2
30°-40°	876.8	23.3
40°-50°	657.3	17.5
50°-60°	421.8	11.2
60°-70°	180.4	4.8
70°-80°	42.6	1.1
80°-90°	7.9	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1574.1	41.9
0°-40°	2450.9	65.2
0°-60°	3530.0	93.9
0°-90°	3761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3761.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1984	1984	1984	1984	1984	
5°	1981	1984	1986	1990	1989	188
15°	1892	1931	1976	1963	1939	534
25°	1731	1792	1882	1848	1816	791
35°	1436	1356	1437	1420	1452	901
45°	1091	892	512	866	1106	835
55°	552	552	191	575	672	500
65°	166	196	61	252	257	177
75°	26	30	8	51	50	37
85°	8	5	4	8	12	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4
2.5°	1985.4	1987.6	1986.5	1986.5	1985.4	1986.5	1986.5	1988.7	1988.7	1986.5	1985.4
5°	1981.2	1983.3	1983.3	1981.2	1981.2	1986.5	1983.3	1985.4	1985.4	1984.4	1984.4
7.5°	1971.6	1971.6	1975.9	1972.7	1972.7	1975.9	1974.8	1976.9	1979.1	1980.1	1980.1
10°	1950.3	1952.4	1953.5	1953.5	1954.6	1957.7	1959.9	1964.2	1966.3	1968.4	1969.5
12.5°	1923.7	1926.9	1927.9	1926.9	1930.1	1934.3	1939.7	1945.0	1948.2	1952.4	1955.6
15°	1891.7	1891.7	1893.8	1897.0	1899.2	1905.6	1910.9	1917.3	1925.8	1931.1	1936.4
17.5°	1856.6	1858.7	1861.9	1861.9	1866.2	1876.8	1880.0	1889.6	1899.2	1904.5	1915.2
20°	1818.2	1820.3	1823.5	1825.7	1831.0	1839.5	1845.9	1854.4	1865.1	1874.7	1885.3
22.5°	1788.4	1784.1	1786.3	1788.4	1793.7	1801.2	1808.6	1819.3	1829.9	1839.5	1850.2
25°	1730.9	1731.9	1735.1	1737.3	1743.7	1750.0	1758.6	1771.3	1780.9	1791.6	1803.3
27.5°	1653.1	1654.2	1659.5	1659.5	1664.8	1675.5	1680.8	1691.5	1704.3	1714.9	1728.8
30°	1564.7	1566.8	1566.8	1571.1	1574.3	1579.6	1584.9	1595.6	1602.0	1611.6	1630.8
32.5°	1483.8	1485.9	1484.8	1483.8	1480.6	1479.5	1478.4	1480.6	1482.7	1485.9	1493.3
35°	1435.8	1430.5	1426.2	1418.8	1410.3	1399.6	1390.0	1377.2	1365.5	1355.9	1345.3
37.5°	1390.0	1389.0	1382.6	1371.9	1354.9	1335.7	1313.3	1285.6	1257.9	1228.1	1199.4
40°	1326.1	1322.9	1317.6	1302.7	1283.5	1260.1	1230.3	1196.2	1151.4	1105.6	1058.8
42.5°	1217.5	1218.5	1212.1	1200.4	1182.3	1159.9	1129.1	1091.8	1043.9	989.5	928.8
45°	1090.7	1090.7	1088.6	1079.0	1066.2	1048.1	1024.7	993.8	946.9	891.5	826.5
47.5°	958.6	959.7	956.5	954.4	949.0	937.3	920.3	896.9	863.8	810.6	745.6
50°	824.4	824.4	829.8	828.7	828.7	824.4	817.0	803.1	774.4	731.8	671.1
52.5°	690.2	692.4	695.6	699.8	705.1	713.6	705.1	698.7	680.6	647.6	595.4
55°	551.7	553.9	559.2	566.7	573.1	581.6	583.7	583.7	574.1	551.7	512.3
57.5°	433.5	430.3	434.6	441.0	449.5	458.0	464.4	471.9	470.8	455.9	423.9
60°	325.9	327.0	330.2	336.6	343.0	350.4	359.0	365.3	368.6	361.1	340.8
62.5°	237.5	237.5	241.8	248.2	251.4	262.0	267.3	270.6	273.7	272.7	259.9
65°	166.2	168.3	170.4	173.6	176.8	183.2	186.4	192.8	194.9	196.0	186.4
67.5°	117.2	114.0	116.1	118.2	121.4	125.7	132.1	132.1	135.3	135.3	128.9
70°	74.6	74.6	75.6	78.8	81.0	82.0	84.2	86.3	89.5	88.4	88.4
72.5°	50.1	49.0	50.1	51.1	52.2	55.4	55.4	56.5	58.6	59.7	55.4
75°	25.6	26.6	28.7	27.7	30.9	28.7	29.8	33.0	32.0	29.8	29.8
77.5°	21.3	21.3	21.3	20.3	22.4	22.4	21.3	23.4	22.4	22.4	21.3
80°	14.9	16.0	14.9	13.8	14.9	13.8	13.8	13.8	13.8	13.8	12.8
82.5°	11.7	9.6	10.7	9.6	10.7	10.7	9.6	8.5	8.5	9.6	8.5
85°	8.5	6.4	7.5	7.5	6.4	6.4	6.4	6.4	6.4	5.3	5.3
87.5°	5.3	3.2	3.2	3.2	4.2	4.2	4.2	3.2	4.2	4.2	2.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4
2.5°	1987.6	1986.5	1988.7	1987.6	1987.6	1986.5	1987.6	1986.5	1988.7	1984.4	1985.4
5°	1987.6	1985.4	1986.5	1987.6	1988.7	1986.5	1986.5	1986.5	1988.7	1986.5	1987.6
7.5°	1983.3	1982.2	1985.4	1987.6	1986.5	1985.4	1987.6	1986.5	1988.7	1987.6	1989.7
10°	1974.8	1975.9	1978.0	1981.2	1982.2	1983.3	1985.4	1985.4	1988.7	1984.4	1986.5
12.5°	1962.0	1966.3	1971.6	1973.7	1978.0	1978.0	1980.1	1981.2	1983.3	1982.2	1985.4
15°	1946.0	1951.4	1957.7	1963.1	1968.4	1971.6	1974.8	1975.9	1979.1	1975.9	1976.9
17.5°	1926.9	1933.2	1942.8	1949.2	1957.7	1960.9	1965.2	1967.3	1970.5	1968.4	1969.5
20°	1900.2	1907.7	1918.3	1927.9	1933.2	1940.7	1946.0	1949.2	1951.4	1949.2	1950.3
22.5°	1863.0	1873.6	1887.5	1894.9	1905.6	1911.9	1913.0	1920.5	1925.8	1920.5	1922.6
25°	1819.3	1829.9	1840.6	1856.6	1866.2	1873.6	1881.1	1882.1	1887.5	1886.4	1885.3
27.5°	1746.8	1760.7	1778.8	1791.6	1804.4	1816.1	1824.6	1826.7	1832.1	1829.9	1831.0
30°	1647.8	1662.7	1679.8	1700.0	1718.1	1729.8	1740.5	1747.9	1753.2	1750.0	1749.0
32.5°	1507.2	1522.1	1540.2	1560.4	1581.8	1598.8	1611.6	1621.2	1627.6	1625.4	1620.1
35°	1346.4	1350.6	1362.3	1378.3	1396.4	1414.5	1426.2	1436.9	1444.3	1446.5	1446.5
37.5°	1181.3	1167.4	1158.9	1158.9	1169.5	1177.0	1187.6	1194.0	1205.8	1210.0	1213.2
40°	1021.5	989.5	959.7	937.3	922.4	921.4	921.4	924.5	935.2	949.0	961.8
42.5°	878.8	827.6	781.8	740.3	710.5	693.4	686.0	687.0	695.6	708.3	729.6
45°	764.8	700.9	643.4	593.3	552.8	526.2	513.4	512.3	518.7	533.6	557.1
47.5°	676.4	608.2	543.2	485.7	442.0	413.3	398.4	394.1	398.4	412.2	439.9
50°	602.9	532.6	465.5	405.8	359.0	329.1	315.3	310.0	315.3	327.0	354.7
52.5°	534.7	462.3	399.4	341.9	291.8	266.3	251.4	248.2	251.4	265.2	287.6
55°	455.9	394.1	332.3	274.8	231.1	205.6	193.9	190.7	193.9	206.6	230.1
57.5°	378.1	324.9	270.6	218.4	181.1	158.7	148.1	143.8	151.2	159.8	187.5
60°	305.7	263.1	217.3	171.5	140.6	120.4	111.8	110.8	112.9	123.6	142.7
62.5°	239.7	204.5	168.3	131.0	105.4	96.9	86.3	85.2	87.3	93.7	108.7
65°	172.6	150.2	122.5	95.9	75.6	63.9	59.7	60.7	62.8	67.1	81.0
67.5°	120.4	104.4	85.2	67.1	52.2	46.9	42.6	41.5	42.6	50.1	57.5
70°	81.0	71.4	57.5	51.1	36.2	28.7	29.8	26.6	30.9	30.9	37.3
72.5°	53.2	46.9	38.3	29.8	25.6	20.3	20.3	19.2	21.3	22.4	27.7
75°	27.7	21.3	21.3	14.9	10.7	5.3	9.6	8.5	7.5	8.5	10.7
77.5°	19.2	16.0	14.9	11.7	10.7	8.5	8.5	8.5	8.5	9.6	10.7
80°	11.7	11.7	8.5	7.5	6.4	5.3	6.4	6.4	6.4	6.4	7.5
82.5°	7.5	6.4	6.4	5.3	5.3	4.2	4.2	4.2	4.2	4.2	6.4
85°	6.4	4.2	4.2	3.2	4.2	7.5	3.2	4.2	4.2	4.2	3.2
87.5°	2.1	3.2	3.2	3.2	2.1	1.1	2.1	3.2	3.2	5.3	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4	1984.4
2.5°	1987.6	1988.7	1988.7	1987.6	1987.6	1985.4	1989.7	1986.5	1987.6	1991.8	1988.7
5°	1989.7	1990.8	1990.8	1989.7	1989.7	1989.7	1990.8	1990.8	1989.7	1988.7	1990.8
7.5°	1994.0	1992.9	1992.9	1990.8	1990.8	1988.7	1990.8	1987.6	1989.7	1987.6	1990.8
10°	1988.7	1989.7	1988.7	1987.6	1987.6	1986.5	1986.5	1983.3	1984.4	1981.2	1983.3
12.5°	1985.4	1984.4	1984.4	1982.2	1980.1	1978.0	1976.9	1973.7	1973.7	1966.3	1969.5
15°	1976.9	1978.0	1974.8	1970.5	1968.4	1963.1	1960.9	1956.7	1952.4	1947.1	1948.2
17.5°	1969.5	1966.3	1962.0	1957.7	1949.2	1945.0	1940.7	1934.3	1932.2	1925.8	1923.7
20°	1947.1	1945.0	1939.7	1932.2	1926.9	1917.3	1913.0	1906.6	1901.3	1894.9	1891.7
22.5°	1918.3	1916.2	1909.8	1902.4	1893.8	1889.6	1885.3	1873.6	1868.3	1861.9	1860.8
25°	1882.1	1878.9	1872.5	1864.0	1859.7	1848.0	1843.8	1835.2	1833.1	1826.7	1825.7
27.5°	1826.7	1822.5	1815.0	1804.4	1796.9	1789.5	1785.2	1778.8	1776.7	1770.3	1769.2
30°	1743.7	1738.3	1723.4	1719.2	1706.4	1698.9	1698.9	1690.4	1691.5	1687.2	1687.2
32.5°	1612.6	1604.1	1592.4	1583.9	1575.4	1571.1	1571.1	1567.9	1570.0	1570.0	1572.2
35°	1439.0	1427.3	1420.9	1415.6	1415.6	1419.8	1432.6	1435.8	1442.2	1447.5	1451.8
37.5°	1216.4	1215.3	1222.8	1229.2	1245.2	1263.3	1285.6	1304.8	1322.9	1335.7	1348.5
40°	975.7	1002.3	1023.6	1053.4	1077.9	1113.1	1153.6	1186.6	1217.5	1239.8	1263.3
42.5°	761.6	795.7	840.4	884.1	927.7	975.7	1028.9	1074.7	1115.2	1146.1	1170.6
45°	593.3	640.1	694.5	749.9	806.3	866.0	921.4	968.2	1010.8	1042.8	1067.3
47.5°	478.2	529.4	591.2	651.9	715.8	778.6	840.4	880.9	916.0	941.6	964.0
50°	395.2	449.5	514.5	583.7	647.6	710.5	763.7	803.1	831.9	854.3	868.1
52.5°	330.2	387.7	457.0	526.2	590.1	647.6	695.6	725.4	748.8	764.8	777.6
55°	272.7	328.1	393.0	458.0	520.9	575.2	614.6	637.0	655.1	664.6	672.1
57.5°	222.6	273.7	333.4	393.0	447.4	492.1	523.0	545.4	553.9	561.3	560.3
60°	174.7	222.6	276.9	328.1	374.9	411.1	433.5	446.3	452.7	455.9	453.7
62.5°	137.4	181.1	222.6	267.3	301.4	332.3	353.6	353.6	356.8	357.9	361.1
65°	102.2	135.3	171.5	204.5	232.2	252.4	264.2	267.3	271.6	270.6	268.4
67.5°	75.6	100.1	126.7	151.2	170.4	183.2	191.7	199.2	198.1	196.0	194.9
70°	52.2	68.2	91.6	106.5	120.4	133.2	135.3	136.3	137.4	138.5	136.3
72.5°	36.2	47.9	60.7	73.5	82.0	87.3	92.7	93.7	93.7	93.7	92.7
75°	18.1	24.5	36.2	41.5	49.0	51.1	55.4	55.4	58.6	54.3	53.2
77.5°	16.0	19.2	25.6	29.8	33.0	36.2	37.3	40.5	39.4	37.3	38.3
80°	9.6	11.7	16.0	18.1	22.4	23.4	24.5	25.6	24.5	25.6	25.6
82.5°	7.5	8.5	10.7	10.7	13.8	13.8	14.9	14.9	16.0	16.0	16.0
85°	4.2	7.5	6.4	12.8	8.5	8.5	10.7	12.8	10.7	10.7	12.8
87.5°	4.2	4.2	3.2	4.2	4.2	4.2	5.3	6.4	6.4	7.5	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P246220

CATALOG NUMBER: LSR8B40D010 EC8B40935 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1984.4	1984.4	1984.4	1984.4
2.5°	1987.6	1989.7	1986.5	1985.4
5°	1990.8	1990.8	1988.7	1988.7
7.5°	1990.8	1990.8	1987.6	1985.4
10°	1982.2	1982.2	1979.1	1976.9
12.5°	1966.3	1966.3	1965.2	1962.0
15°	1946.0	1946.0	1941.8	1938.6
17.5°	1918.3	1920.5	1915.2	1915.2
20°	1888.5	1887.5	1883.2	1881.1
22.5°	1857.6	1855.5	1854.4	1848.0
25°	1824.6	1822.5	1819.3	1816.1
27.5°	1768.2	1767.1	1763.9	1759.6
30°	1681.9	1680.8	1676.6	1676.6
32.5°	1570.0	1569.0	1564.7	1565.8
35°	1453.9	1458.2	1456.1	1451.8
37.5°	1357.0	1360.2	1362.3	1360.2
40°	1276.0	1285.6	1286.7	1288.8
42.5°	1189.8	1202.6	1206.8	1208.9
45°	1086.4	1098.2	1107.8	1105.6
47.5°	981.0	989.5	998.0	991.7
50°	879.8	885.1	888.3	888.3
52.5°	784.0	784.0	782.9	784.0
55°	674.2	674.2	670.0	672.1
57.5°	559.2	561.3	558.1	552.8
60°	452.7	447.4	445.2	442.0
62.5°	352.6	352.6	345.1	354.7
65°	264.2	261.0	257.8	256.7
67.5°	191.7	190.7	187.5	186.4
70°	135.3	131.0	129.9	127.8
72.5°	90.5	90.5	88.4	88.4
75°	55.4	50.1	49.0	50.1
77.5°	38.3	37.3	37.3	36.2
80°	25.6	24.5	26.6	23.4
82.5°	16.0	17.0	16.0	17.0
85°	10.7	12.8	11.7	11.7
87.5°	6.4	6.4	6.4	6.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)